

In the Claims

Please replace all prior versions, and listings, of claims in the application with the following list of claims:

1- 108. (Cancelled)

109. (Currently amended) A device for adhering at least one cell in a specific and predetermined pattern comprising:

a surface; and

a plurality of ~~immobilization~~ islands in a specific and predetermined pattern over the surface that adhere cells to the islands, the islands isolated from each other by a ~~background~~ region contiguous with the islands and to which the cells do not adhere, and wherein the islands or the ~~background~~ region in which the cells do not adhere or both comprise a self-assembled monolayer.

110. (Cancelled)

111. (Currently amended) The device of claim 109 wherein the ~~background~~ region in which the cells do not adhere or the ~~immobilization~~ islands comprise more than one self-assembled monolayer.

112 – 128. (Cancelled)

129. (Previously presented) The device of claim 109, wherein the surface is defined by a plate.

130. (Previously presented) The device of claim 129, wherein the plate is transparent to electromagnetic radiation.

131. (Currently amended) The device of claim 109, wherein at least one of the ~~immobilization~~ plurality of islands comprises a self-assembled monolayer.

132. (Currently amended) The device of claim 109, wherein the ~~background~~ region in which the cells do not adhere comprises a self-assembled monolayer.

133. (Currently amended) The device of claim 109, wherein the ~~immobilization~~ islands are located in a plurality of predetermined positions on the surface.

134. (Currently amended) The device of claim 109, wherein at least one of the ~~immobilization~~ plurality of islands binds only a selected cell type.

135. (Currently amended) The device of claim 109, wherein the ~~immobilization~~ islands are able to adhere one cell type but are not able to substantially adhere a second cell type different from the first cell type.

136. (Currently amended) The device of claim 109, wherein the plurality of ~~immobilization~~ islands includes a first island able to adhere a first population of cells and a second island able to adhere ~~of~~ a second population of cells different from the first population of cells.

137. (Currently amended) The device of claim 109, wherein at least one of the plurality of ~~immobilization~~ islands has a predetermined shape that is able to influence the shape of a cell adhered thereto.

138. (Currently amended) The device of claim 109, wherein the ~~immobilization~~ islands are sufficiently isolated to prevent cells adhered to the ~~immobilization~~ islands from contacting each other except via formation of cellular bridges above and free of adhesive contact with the ~~background~~ region in which the cells do not adhere.

139. (Currently amended) The ~~method~~ device of claim 109, wherein at least one of the plurality of ~~immobilization~~ islands has a size chosen such that only an individual cell is able to adhere thereto.

140. (Currently amended) The ~~method~~ device of claim 109, wherein at least one of the plurality of ~~immobilization~~ islands has a size sufficient to allow a plurality of cells to adhere thereto.

141. (Currently amended) The device of claim 109, wherein at least one of the ~~immobilization~~ plurality of islands is between 1 and 2,500 square microns.

142. (Currently amended) The device of claim 109, wherein at least one of the ~~immobilization~~ plurality of islands is between 1 and 500 square microns.

143. (Currently amended) The device of claim 109, wherein at least one of the ~~immobilization~~ plurality of islands is between 1 and 100 square microns.

144. (Currently amended) The device of claim 109, wherein at least one of the ~~immobilization~~ plurality of islands has a lateral dimension of between 0.2 and 10 microns.

145. (Currently amended) The device of claim 109, wherein at least one of the ~~immobilization~~ plurality of islands is elongated.